

## **I. Amendments to the Specification**

Please amend the specification as shown:

Please delete paragraph [0038] and replace it with the following paragraph:

**[0038]** The B subunit of a CDT is encoded by the *cdtB* gene. The *cdtB* gene has been cloned and characterized from a variety of organisms, including *Haemophilus ducreyi* (Cope, L., Lumbley, S., Latimer, J., Klesney-Tait, J., Stevens, M., Johnson, L., Purven, M., Munson, R., Lagergard, T., Radolf, J. and Hansen, E., 1997, Proc. Natl. Acad. Sci. USA, "A diffusible cytotoxin of *Haemophilus ducreyi*," Vol 94: pp. 4056-4061) (SEQ ID 1 **which encodes SEQ ID NOS 10-12**), *Campylobacter jejuni* (Pickett, C., Pesci, E. Cottle, D., Russell, G., Erdem, A. and Zeytin, H., 1996, Infection and Immunity, "Prevalence of Cytolethal Distending Toxin Production in *Campylobacter jejuni* and Relatedness of *Campylobacter* sp. *cdtB* Genes," pp. 2070-2078) (SEQ ID 2 **which encodes SEQ ID NOS 13-16**), and *Escherichia coli* (Scott, D., and Kaper, J., 1994, Infection and Immunity, "Cloning and Sequencing of the Genes Encoding *Escherichia coli* Cytolethal Distending Toxin," pp. 244-251; (SEQ ID 3 **which encodes SEQ ID NOS 17-19**), Pickett, C., Cottle, D., Pesci, E., and Bikah, G., 1994, Infection and Immunity, Cloning, Sequencing, and Expression of the *Escherichia coli* Cytolethal Distending Toxin Genes," pp. 1046-1051) (SEQ ID 4 **which encodes SEQ ID NOS 20-22**). The sequencing information for these various *cdtB* genes reveal that considerable heterogeneity among *cdtB* (and *cdtA* and *cdtC*, see below) genes may exist (Pickett, C., Pesci, E., Cottle, D., Russell, G., Erdem, A. and Zeytin, H., 1996, Infection and Immunity, "Prevalence of Cytolethal Distending Toxin Production in *Campylobacter jejuni* and Relatedness of *Campylobacter* sp. *cdtB* Genes," pp. 2070-2078). Indeed, the predicted amino acid sequences for the proteins encoded by the *cdtB* genes listed as SEQ ID 3 and SEQ ID 4 share only 55-56% identity, despite being from different strains of the same bacteria (Pickett, C., Pesci, E., Cottle, D., Russell, G., Erdem, A. and Zeytin, H., 1996, Infection and Immunity, "Prevalence of Cytolethal Distending Toxin Production in *Campylobacter jejuni* and Relatedness of *Campylobacter* sp. *cdtB* Genes," pp. 2070-2078, analyzing sequences presented in Scott, D., and Kaper, J., 1994, Infection and Immunity, "Cloning and Sequencing of

the Genes Encoding Escherichia coli Cytolethal Distending Toxin," pp. 244-251 and Pickett, C., Cottle, D., Pesci, E., and Bikah, G., 1994, Infection and Immunity, Cloning, Sequencing, and Expression of the Escherichia coli Cytolethal Distending Toxin Genes," pp. 1046-1051).

Please delete paragraph [0040] and replace it with the following paragraph:

**[0040]** Preferably, the cdtB gene has the nucleotide sequence listed as SEQ ID 5 which encodes SEQ ID NO: 23). This sequence represents a cdtB gene cloned and characterized from Escherichia coli strain MBU. E 412 (Genbank accession number AF373206).

Please delete paragraph [0057] on page and replace it with the following paragraph:

**[0057]** Considering the above, a particularly preferred antisense oligonucleotide has a sequence complimentary to the sequence listed as SEQ ID 6 which encodes SEQ ID NO: 24).

Please delete paragraph [0061] and replace it with the following paragraph:

**[0061]** Preferably, the inducible promoter is strictly inducible by heat shock. This characteristic ensures that activation of transcription of the B subunit and antisense oligonucleotide will occur only in the presence of heat shock, which allows for tight regulation of the gene therapy procedure. This strict inducibility can be accomplished by using a segment of a heat shock promoter. Indeed, segments of the human Hsp70B heat shock promoter that are strictly inducible by heat shock have been determined (Schiller, P., Amin, J., Ananthan, J, Brown, M., Scott, W., and Voellmy, R., 1988, J. Mol. Biol., "Cis-acting Elements Involved in the Regulated Expression of a Human HSP70 Gene, Vol. 203: pp.97-105 (SEQ ID NO: 8); Voellmy, R., Ahmed, A., Schiller, P., Bromley, P., and Rungger, D., 1985, Proc. Natl.

Acad. Sci. USA, "Isolation and functional analysis of a human 70,000-dalton heat shock protein gene segment," Vol. 82: pp. 4949-4953). A sequence of a preferred such segment appears as SEQ ID 9 **(which encodes SEQ ID NO: 25)**. Molecular vectors utilizing such a segment are readily available from commercial sources, and include the p2500-CAT and pD35X vectors available from Stressgen Biotechnologies Corporation of Victoria, British Colombia, Canada.